AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) A computer system comprising:

a main computer system comprising a database, an application server and a front-end server, wherein the main system executes an application in cooperation with a human user; and

a remote service computer system for evaluating problems in the main system, comprising:

a service module to collect problem related data from the main system, said problem related data representing a problem identified about data in the main system;

an acquisition module to acquire knowledge representations;

a knowledge module to receive the knowledge representations, ~~and store~~ generate solution identification rules comprising computer instructions to automatically solve the problem, group sets of the solution identification rules semantically, and store the knowledge representations with the sets of semantically grouped solution identification rules; and

an inference module to process problem related data with knowledge representations to identify ~~solutions~~ the solution identification rules and forward the ~~solutions~~ solution identification rules through the

service module to the main computer system, wherein the inference module identifies the ~~solutions~~ solution identification rules by applying knowledge representations to the problem related data in at least one of a sequential order, a hierarchical order, and a dynamically adaptive order and wherein the identified ~~solutions~~ solution identification rules are applied to solve the problem identified in the main system.

2. (Original) The computer system of claim 1, wherein the main system and the service system communicate through remote function call connections provided by the service module.

3. (Original) The computer system of claim 1, wherein the service module monitors the application server and the database according to instructions from the inference module.

4. (Original) The computer system of claim 1, wherein the main system and the service system are systems in client/server configuration.

5. (Currently Amended) The computer system of claim 1, wherein the service system returns ~~solutions~~ solution identification rules that solve the problem directly in the main system.

6. (Currently Amended) The computer system of claim 1, wherein the service system returns ~~solutions~~ the solution identification rules that solve the problem indirectly by being further knowledge representations for a further inference module operating for the main system.

7. (Currently Amended) A method to evaluate problems in a main computer system that has a database, an application server, and a front-end server and that executes an application in cooperation with a human user, the method comprising ~~the following steps~~:

collecting problem related data from the main system by a service module of a remote service system, said problem related data representing a problem identified about data in the main system;

acquiring knowledge representations by an acquisition module of the service system;

receiving the knowledge representations by a knowledge module;

generating solution identification rules comprising computer instructions to automatically solve the problem;

grouping sets of the solution identification rules semantically;

storing the knowledge representations with the sets of semantically grouped solution identification rules by the knowledge module of the service system;

processing problem related data with the knowledge representations by a inference module to identify ~~solutions~~ the solution identification rules wherein the inference module identifies the ~~solutions~~ solution identification rules by applying

knowledge representations to the problem related data in at least one of a sequential order, a hierarchical order, and a dynamically adaptive order;

forwarding the ~~solutions~~ solution identification rules through the service module to the main system; and

applying the identified ~~solutions~~ solution identification rules to solve the problem identified in the main system by changing the state of memory in the main system.

8. (Currently Amended) The method of claim 7, wherein in the step of processing, the inference module performs an action selected from the group of:

identify the solutions [[form]] from a set of predefined advices of the application,

communicate questions to the user by composing the questions from predefined passages provided by the application, and

~~analyses~~ analyze responses that the user enters in natural language.

9. (Original) The method of claim 8, wherein the service system forwards problem data and solutions for further analysis by a human technician.

10. (Original) The method of claim 8, wherein the service system forwards problem data and solutions to the further computer in a format that allows analysis by an expert system in the further computer.

11. (Original) A computer program product comprising program code means for performing all the steps of anyone of the claims 7-10 when the computer program product is run on a computer.

12. (Currently Amended) An inference module stored on a computer readable medium, that when executed on a processor, causes the processor to perform a method, the method comprising:

evaluating problems in a main computer system that executes an application, wherein:

the inference module processes problem related data with knowledge representations to identify ~~solutions~~ solution identification rules, said knowledge representations being stored with sets of ~~semantically grouped~~ solution identification rules semantically grouped, and

the inference module characterized in that the inference module is part of a service system receiving problem related data from the main computer system over a network, said problem related data representing a problem identified about data in the main system; and

returning ~~solutions~~ the solution identification rules to the main system, wherein in a first case, the service system returns ~~solutions~~ a first set of solution identification rules that solve the problem directly and, in a second case, the service system returns ~~solutions~~ a second set of solution identification rules that solve the problem indirectly by being further knowledge representations for a further inference module,

further wherein during the processing of problem related data, the inference module identifies the ~~solutions~~ solution identification rules by applying knowledge representations in at least one of a sequential order, a hierarchical order, and a dynamically adaptive order[[.]], and

further wherein the solution identification rules comprise computer instructions to automatically solve the problem.

13. (Original) The computer system of claim 1, wherein the main system executes an enterprise resource planning application.

14. (Original) The computer system of claim 1, wherein the main system is implemented as an R/3 system.

15. (New) The computer system of claim 1, wherein the knowledge representations are regularly updated.

16. (New) The method of claim 7, wherein the knowledge representations are regularly updated.

17. (New) The inference module of claim 12, wherein the knowledge representations are regularly updated.